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Soybean Digest



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**BEANS AND SOIL FERTILITY
SOY TO STARVING PEOPLES
MANUFACTURE OF MARGARINE**

Official Publication

OF

THE AMERICAN SOYBEAN ASSOCIATION

VOLUME 4 • NUMBER 4



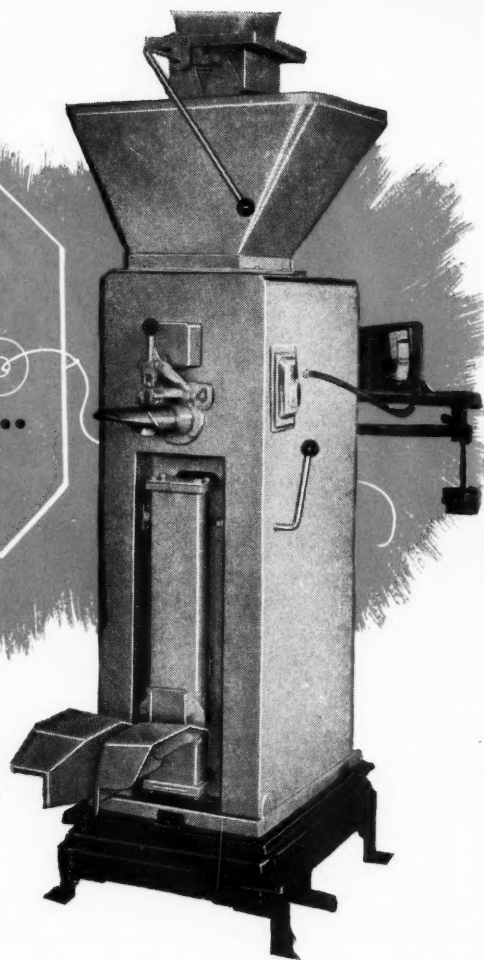
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THE Soybean Digest

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FEBRUARY ☆ 1944

No. 4

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YOUR STOMACH FEEL QUEER?

R EPORTS reach us that large quantities of mineral oil are being used in public eating places as a substitute for edible oils, especially in salad dressings.

Wide use of mineral oils as a food is mirrored in drug store sales. In Washington, headquarters of the Food and Drug Administration (which is entrusted with the policing of such matters) some restaurants are reported to be using mineral oil without stint. Officials of Food and Drug say they are sharply opposed to such use, pointing out that it is simply an adulterant in foods. However, they seem to be doing little or nothing about it.

Food and Drug Administration officials admit that investigations on animals have shown that the ingestion of mineral oil prevents proper assimilation of several of the essential vitamins and minerals. Interference is worse when the oil is mixed with food, as in salad dressing.

The council on food and nutrition of the American Medical Association goes even farther. It says evidence is conclusive that liquid petrolatum can be absorbed in small quantities from the intestine, and it indicates that lesions of the liver and other organs may be produced by continued ingestion of mineral oil. The council makes a strong case against the use of mineral oil in food, pointing out the dangers to public health.

This situation is very interesting to those of us in close contact with soybean producers. During the past few days we have been hearing stories that the demand for soybean oil has lessened. Some mills here in Iowa have been forced to sell at less than ceiling price, and others have been forced to close down because they could not dispose of their oil. And this, in spite of what is declared to be the greatest shortage of fats and oils in history! And when we are being asked to produce 20 percent additional soybean acreage!

Can it be the Food and Drug Administration is winking at this gigantic imposition on public health? That agency

maintains a huge staff of investigators. The appropriation for them is enormous. It would appear that these investigators have used their time and talents more toward the blocking of the fair and proper use of soy flour and soy foods than in running down those guilty of foisting on the public quantities of injurious mineral oil. There are pure and nutritious vegetable oils available — soybean oil and cottonseed oil — for such usage.

EVERYBODY IS SHORT

FOR every five pounds of protein feed needed to feed America's livestock properly only four pounds are available. The fifth pound just is not to be had. A shortage exists. Livestock prices are conducive to good feeding practices. Every farmer wants protein feeds. He is not getting them in the desired quantities.

Feed mixers have questioned our statement, made last month, that a farmer can buy plenty of mixed feeds if he wants them. They point out that they, too, are limited in the quantity of protein which they can use. The demand for their products far exceeds the supply which protein carriers will permit. We have asked one of them to state, for our readers, their position. You will find it on page 8. If we are guilty of misstatement we stand corrected.

Whenever the demand for any product far exceeds the supply there results a situation in which someone comes up short. This is no exception. The farmer is short. The feed mixer is short. The processor is short. There have been inequalities and maladjustments. Sections of the nation that have never before used soybean oil meal have received large quantities. Drought areas have been favored, and rightfully. The Midwest soybean producer can not buy as much soybean oil meal as he would like. So, he feeds whole or ground soybeans. The soybean oil contained therein is lost. The war food supply is reduced.

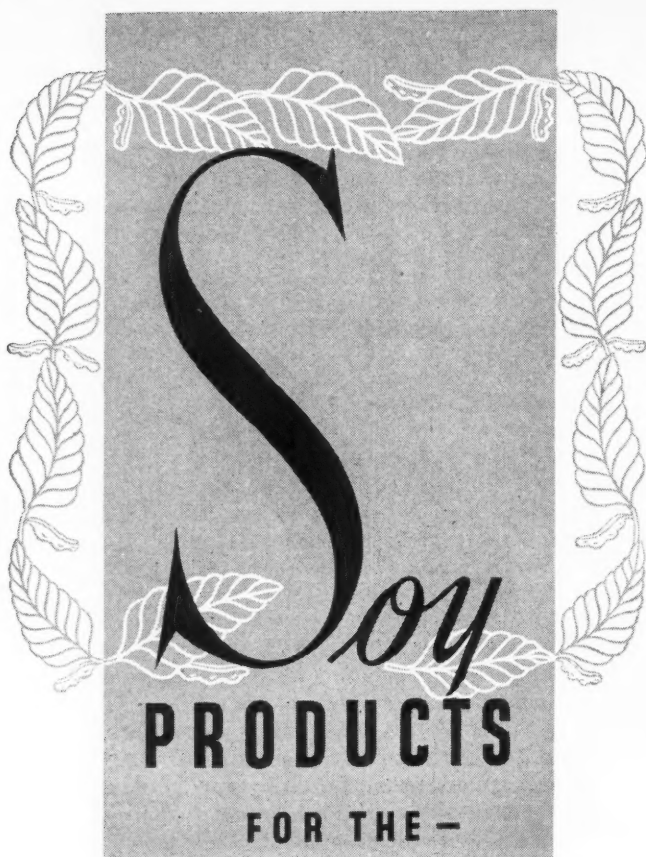
Governmental officials, processors, feed mixers, feed dealers and AAA committeemen have done everything they could to right the situation. It is being corrected. As pastures turn green it will change. It is hoped that out of the year's experience will develop a plan of processing and distribution which will insure economical usage of the crop, and satisfactory supplies for the man who grows soybeans. The completion of new processing plants now under construction will assist materially.

What is more important now is that we also be doing some thinking and planning for the day when protein supplies will be greater than the demand. That day may not be far off. Will the industry be prepared for it?

WHY PENALIZE GROWERS?

AS THIS is being written the AAA township committeemen are canvassing their territories to secure the desired acreages of war crops for '44. Great difference of opinion exists pertaining to the degree of success which can be expected. Unquestionably the Midwest farmer is one of the most patriotic individuals in the nation. He has sons and brothers in the armed services. He knows the world looks to him to produce the food-stuffs which will win the war and write the peace. Perhaps his patriotism will outweigh the financial returns which are to be received from other crops. In such case the soybean acreage goals will be achieved.

It is still our opinion that the price relationship between corn and soybeans under 1944 schedules is out of adjustment. The board of directors of the American Soy-



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bean Association, at their December meeting, authorized a resolution calling for a ratio of 2.5 to 1 as between soybeans and corn. That resolution was forwarded to officials in charge of the 1944 program, but to date has been ignored.

Announced price schedules were, according to WFA administrator Marvin Jones, only tentative. Information coming out of Washington indicates there may be a change. Good business and good planning dictate it. It is still our hope that Midwest farmers will not be asked to sacrifice income in order to grow soybeans. The long-time effect upon the crop would be disastrous. In a few weeks we will know the 1944 results.

WE HOPE IT IS TEMPORARY

MOVEMENT of Midwest beans into processing mills in Southern and Western territory has seriously disrupted normal channels of flow for soybean oil, especially in the territory west of the Mississippi river. Refiners in the South and West are able to fill their needs from processing plants close at home. Midwest mills, from where the greater portion of normal soybean oil requirements are secured, find no takers. Oil supplies are building up until storage facilities are no longer available. It is hoped that out of a meeting with CCC officials in Chicago on February 12 will come some relief. While regarded as only a temporary situation, it is very serious.

AS SEEN FROM WASHINGTON

Protein Distribution War Food Administration this month issued its third major protein feed distribution order of the 1944-1945 season, directing a "set aside" of 20 percent of March oil seed meal production for movement by the trade into deficit feed areas.

Barring an unforeseen jump in the demand for raw protein ingredients this spring, the March set aside order was expected to be the last for this season, with the possible exception of a small allocation of April output.

State allocations of the February set aside meal were sent out from Washington early this month, and distribution is already under way.

January set aside meal has been distributed, but WFA's Feed and Livestock Branch which handles protein meal distribution is holding up announcement of total allocations to states pending completion of the feed program.

From December 23 through January corn belt states were allotted a total of nearly 33,000 tons of oil seed meal, slightly more than 23,000 tons of which was soybean meal. Iowa's soybean meal allotment for this period ran to a little more than 3,000 tons, Illinois about 2,500, Indiana, 2,200, Missouri slightly over 5,000, and Minnesota 600 tons.

Purina Mills of St. Louis, Mo., and the Honeymead Products Co. of Cedar Rapids, Iowa, protested the January set aside order on grounds they were not mixing feed up to the permitted 1941-1942 average level, that to comply with the order would force a partial shutdown of their plants, and that this would cut into output of turkey feeds needed to maintain this year's increased hatch.

The protest was aired at a hearing in Washington the last week of January. It ended with the two companies agreeing to deliver their quotas of January set aside meal by February 15, but with the understanding that adjustments would be made on future quotas.

As a result, Purina's February quota was allotted back to the company, Honeymead Company was given a partial rebate of its February quotas, and a few other companies were accorded similar treatment.

See page 15 for further Washington dispatches.

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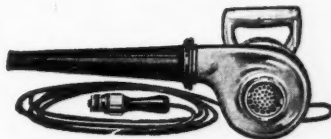
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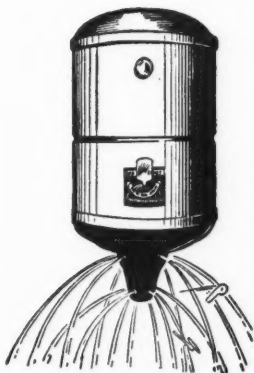
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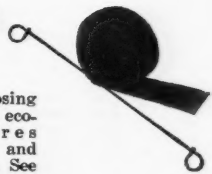
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The Manufacture of MARGARINE

By HASKELL DONOHO

• Because of the great current interest in margarine the editors asked Mr. Donoho to prepare this factual article on its production. Margarine is one of the chief outlets for soybean oil at the present time and offers a very substantial postwar market. The author is a member of the law firm of Tocker, Todd and Donoho. He was formerly an attorney in the solicitor's office of the U. S. Department of Agriculture.

THE OIL that is being produced under the war-compelled soybean program is used almost exclusively for human food. Some 50 percent of this oil is going into vegetable shortening, and approximately 38 percent (1942) is being used in the manufacture of margarine. The importance of margarine as an outlet for soybean oil is obvious.

Soybean oil is equally important to the margarine industry. In 1938 approximately 10 percent of the oil used in the manufacture of margarine was soybean oil. In 1942 38 percent of all margarine was made from soybean oil. In that year over 133 million pounds of soybean oil were used in the manufacture of margarine. The figures are not yet available for 1943, but a substantial increase in the use of soybean oil in margarine is indicated.

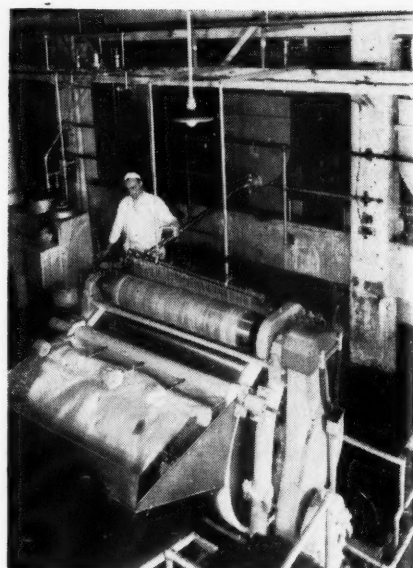
Under present conditions of scarcity, conditions caused by the shutting off of imports due to Japan's conquests, the soybean

producer need not be concerned about the availability of outlets for all the oil that he can produce. The soybean producer, however, is not now thinking in terms of producing soybeans only for the duration of the war. He is interested in the future. He has just learned how to raise soybeans. He has purchased drills, cultivators and combines. He has changed his farming methods to fit soybeans into his crop rotations. He has found soybeans to be a profitable crop, eminently suited to corn belt conditions, and he would like to continue to raise soybeans after the war. Hence, the interest of the soybean producer in oleomargarine. For, all the postwar possibilities for this product, margarine is one of the most promising.

The relationship between soybeans and margarine is not a matter of common knowledge. The relationship, however, is very real. Because it was believed that soybean producers would be interested in becoming better acquainted with the margarine industry, the editors of *The Soybean Digest* are publishing this article dealing factually with the margarine industry with particular reference to its manufacturing processes. It must be emphasized that the statement which follows is written by a layman for the information of laymen. It is stated in non-technical language and no pretense is made to scientific exactness in description or definition.

Margarine may be simply defined as a concentration of refined, bleached, hydrogenated and deodorized edible oils, emulsified in milk. An attempt will be made briefly to describe the processes through which the raw materials pass in order to form the finished product.

The crude oil, usually soybean oil or cottonseed oil, is refined by removing from it all excess free fatty acids. The refined oil



Crystallizing roll

is then bleached to take out all coloring matter. Fuller's earth is used in this process. After that, the oil is hydrogenated. A selective hydrogenation is used to obtain the melting point needed to meet seasonal requirements. The aim of hydrogenation is to provide a finished margarine product which has the greatest household utility value. In the summer, for example, the melting point of margarine is raised so that it will withstand better the high temperatures then prevailing, and, conversely in the winter time the melting point is reduced to improve the product's spreading qualities. After hydrogenation, the oil is washed, dried, and rebleached.

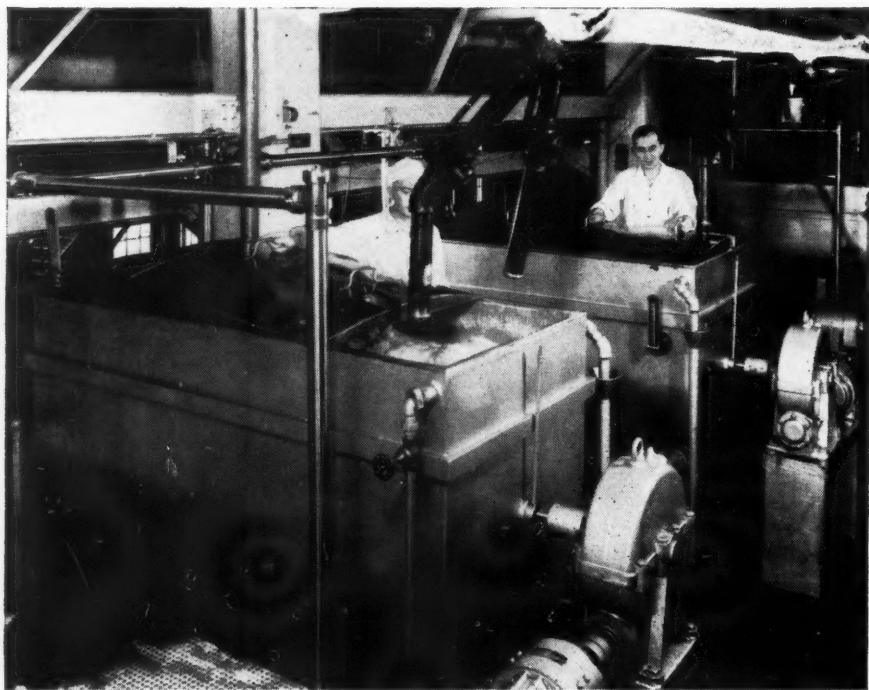
DEODORIZING

The next step is deodorizing. This process is carried out under carefully controlled high temperature, ranging from 465° to 470° F., and under almost perfect vacuum conditions. Deodorizing is a steam vacuum distillation process and produces an absolutely sterile, bland, neutral, flavorless oil.

The oil having been processed into suitable form is then ready for further processing into margarine. The basic material other than oil used in the manufacture of margarine is skim milk. Fresh skim milk is delivered from the dairies in tanks from which it is pumped directly to pasteurizers. The pump pipe fittings and pipe lines for handling the milk are of stainless steel or other sanitary construction. Needless to say, the milk is handled under the most careful sanitary conditions. After the milk has been pasteurized and cooled, it is treated with specially prepared cultures. These cultures are propagated in the laboratories of the margarine factories under the supervision of bacteriologists. The ultimate result is that a rich, full milk flavor is produced which is ultimately imparted to the bland, neutral oil.

The emulsification of the milk and oil now takes place. A weighed amount of oil is delivered to the oil-weigh tank. At this point a sufficient quantity of vitamin A concentrate is blended with the oil so that each pound of finished margarine contains 9,000 U.S.P. units plus of vitamin A. At the same time a weighed amount of cultured milk is placed in the milk-weigh tank. To this is added an amount of salt sufficient to obtain approximately three percent salt by weight in the finished margarine. Further, in many plants, a derivative of glycer-

Mixing vats — fats or oils, milk, salt, vitamins, etc.



ine is added to obtain approximately 0.20 percent in the finished product, and an amount of sodium benzoate is added to obtain approximately 0.10 percent in the finished product.

At this stage the oil mix and the milk mix are delivered to weighing tanks where they are properly tempered and then emulsified. The finished emulsified mix is then crystallized by either an external or internal chilling unit. The quick congealing of the emulsified mix produces a homogeneous mass of all ingredients and thereby seals the fresh flavor of the milk in the oil.

The emulsification in the majority of margarine plants is accomplished in a continuous machine. The principle of this machine is high speed agitation under con-

with the product or its constituent parts is washed, scrubbed, and steamed daily with live steam. Employees in margarine plants pass rigid medical examinations. Further, periodic health examinations are required of employees at regular stated intervals during their employment. Margarine plants maintain a production schedule so that only strictly fresh margarine is manufactured and shipped.

The above is a brief description of the principal processes involved in the manufacture of margarine. That these processes produce a product of uniform excellency is attested by the universal approval which has been placed upon the commodity during recent years by nutritionists and scientific fact finding agencies and institutions.

Kabott Is Edible

By A. C. ARMY

Minnesota Experiment Station

The Kabott soybean was developed as a field variety but tests indicate that it can be used to good advantage as a vegetable variety, both for canning and for home gardens. In 1942 Kabott proved to be one of the most desirable varieties for quick freezing. Seed of the 1943 crop of this variety was used as a fresh green vegetable and canned. The quality of the products compared favorably with the quality of the products from the Bansei and Kanro varieties. The mature seeds of Kabott are pure yellow in color and medium in size. Mature seed of this variety has proven excellent for boiling, baking, and for producing sprouts.

Kabott is an upright growing, productive, early maturing variety. Accurate comparisons of time of maturity for Kabott and Bansei are not available here. The indications are that it will provide green beans and will mature at least two weeks earlier than Bansei. The pods of Kabott do not open and the seeds fall to the ground even though the plants are left standing long after full maturity.

Kabott was developed at the Central Experimental Farm, Ottawa, Canada. Seed of the 1943 crop is listed for sale by a number of North Dakota growers. Bulletin number 53 of the State Seed Department, Fargo, North Dakota, contains a list of these growers.

★ RESEARCH ★

New Disease on Soybean Seed

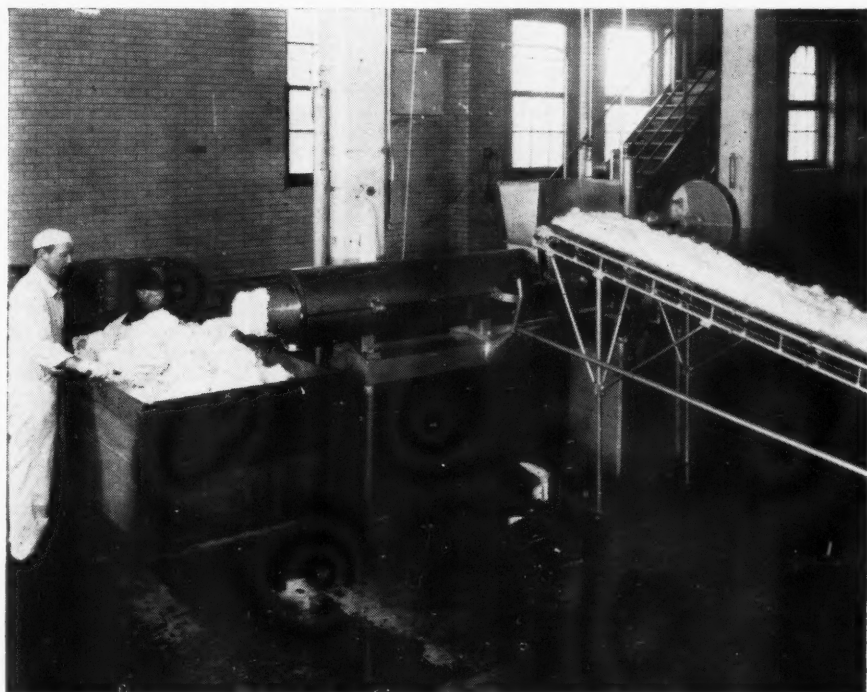
A new disease on soybean seeds, the Yeast Spot disease, has been found at experiment station plots in Oklahoma and North Carolina during the past year, as reported in *The Plant Disease Reporter* of the Bureau of Plant Industry, Washington.

D. A. Preston and W. W. Ray report: "The disease was present in all of the 25 varieties of oil beans in the plots at Stillwater. In addition, several varieties of edible soybeans were similarly affected, and no resistant varieties were found.

"Apparently this organism attacks only the seeds, without affecting the pods. The disease symptoms on the seeds are light cream-colored, sunken spots. The seed coat remains intact, but the affected area of the cotyledons becomes very white in color and has a noticeable cheesy or mealy texture. In more advanced cases the seeds never mature, but remain small in size and are badly shriveled.

"The organism isolated from the cream-colored, sunken spots on the seeds was a species of *Nematospora*. More recent investigations have reduced this species to synonymy with *N. coryli* Peglion. The morphological characters of our soybean isolate agree with those of *N. coryli* Peglion."

S. G. Lehman, University of North Carolina, states: "This yeast spot has been found at several locations in this state and on seeds of a number of varieties. The writer's observations indicate that 0.5 percent of the seeds may be infected in some fields."



Mycronisator or worker. Right shows belt delivering margarine from crystallizing roll.

trolled low temperatures. This process emulsifies and congeals the product at the same time so as to fix the emulsion and make the margarine ready for packing. The advantage of this continuous and close system is that at no point during the operation does the product come in contact with the hands. Following the emulsion, the product is automatically discharged into stainless steel rolls and wrappers where the margarine is molded into prints of desired size and automatically wrapped with a parchment wrapper.

The next step is the carton operation, at which point the carton is automatically placed on the product and a packet of artificial coloring is inserted. The filled cartons are packed into shipping containers and are now ready for regular distribution channels. Only at this point is the margarine handled other than mechanically.

Because margarine is a perishable food commodity and because it is manufactured in modern plants, the most rigid manufacturing conditions are universally followed in its manufacture.

Laboratory control is exercised throughout. Chemists check each ingredient throughout all the processes leading to the manufacture of the finished product. All ingredients are weighed in stainless steel tanks to insure maximum sanitary conditions. All equipment that comes in contact

SCHULTZ HEADS PILLSBURY DIVISION

Harry R. Schultz, former president and manager of Standard Soy Bean Mills at Centerville, Iowa, has been appointed manager of a new soybean division of Pillsbury Flour Mills Company, it is announced. Schultz has been with the Pillsbury organization since October.

Headquarters of the division will be located temporarily at Centerville, Iowa, where the company last October purchased the plant of the Standard Soy Bean Mills.

A pioneer in the soybean industry and an authority on milling and processing soybeans, Schultz has been identified with the soybean industry during the entire period of its skyrocketing importance. He was a founder of the Centerville soybean plant in 1929, one of the first west of the Mississippi river.

Schultz will direct operations of Pillsbury's new soybean processing plant now in construction at Clinton, Iowa, also headquarters of Pillsbury's two-year old feed mills division. The company's Clinton soybean plant will employ the latest features of the solvent extraction method and will be one of the largest soybean processing plants in Iowa, according to Schultz.



SOIL FERTILITY

and Soybean Production

By WM. A. ALBRECHT

THE DAYS of the pioneers are not all hidden away in past history. They are in the present. These pioneers have dared to demonstrate that if soybeans as food can contribute to victory, they, as farmers were ready to do their part in attempting to grow soybean seed in spite of the once-prevalent contention that the soybean plant is not a profitable seed producer and is suited only as a forage crop in Missouri. This contention is being pushed farther into past history.

Soybean production calls on the soil fertility as help to manufacture substances which livestock gladly eat. It is in terms of this demand for extra fertility that the soybean plant is much different from a weed. It is by providing extra soil fertility that we make a soil healthy enough to grow not only the soybean forage that may be mainly of woody structure similar to weeds, but that we undergird the plant with those helps through which it manufactures during the growing season within its woody frame the compounds that are finally mobilized and assembled in the pods as seeds. Seed production as many pods and many seeds per pod, demands healthy soils that are delivering plant nutrients liberally.

CHEMICAL COMPOSITION

The chemical composition of the seed is not so variable. That of the forage may be highly so. In this fact there is danger of deception, when forage only is considered. Occasionally plants grow to good size and produce no seed. Again only a small plant may be well loaded with its fruit. Forage is made of carbon, hydrogen and oxygen supplied by the air and water. Seeds demand phosphorus, calcium, magnesium, potassium, and other elements of soil fertility.

When crops fail to produce satisfactory seed yields we are prone to say as was said of the soybean crop when it was first introduced about the time of the first World War, namely, "It doesn't yield well as seeds but it makes much hay." We are prone to forget that if the plant of large tonnage yield as forage fails to make much seed, there can be little soil fertility as minerals and little feed value in the forage as hay.

When the fertility of the soil goes down, then the forage crop truly must "go up in the air." The hay must be just so much fresh air, water, and sunshine with values mainly as fuel or as so much wood. When the crop can't find liberal supplies of soil fertility from which to make itself complete, it can build only a woody framework by

means of more air and sunshine. In no unreal sense it is the declining soil fertility that has put the farming business "up in the air" in more ways than one.

We cannot escape our responsibility to the soil by shifting from soybeans as seed crops that are not giving good seed yields per acre to the use of this crop as forage in the belief that the hay will have high feeding value because the plant's pedigree says it is a legume. Regardless of the pedigree, both the forage value of the crop as animal feed, and the seed yield in bushels per acre depend on the soil fertility. Unless the fertility of the soil is mobilized generously the seed yield cannot be high, nor the forage highly nutritious.

To accept much tonnage per acre as roughage in the form of hay when the same crop would be too low as a seed producer is merely to pass the deception on to the animals that eat the hay. Animals so deceived can do none other than pass the deception back to us in the breeding deficiencies, diseases, poor returns, and other troubles commonly passed off as "bad luck." We are witnessing a rejuvenation of the belief that agriculture can survive and can profit only when we keep faith with the land, and when we do not deceive the animals and much less deceive ourselves under neglect of the soil fertility.

In the minds of some persons, soybeans are considered to be an "acid-tolerant" legume, but on soils naturally highly acid, it cannot be true. Because when the coming in of acidity means the going out of plant nourishment, then the belief in an "acid-tolerant" crop is equivalent to the belief that the crop is tolerant to starvation. Plant breeding for acid tolerance would be the equivalent of raising the hope of maintaining life without nourishing it.

We know full well that the soybean plant does not produce seed well on very acid soils. This plant has illustrated its response to calcium fertilization, as the liming results so well show. It has also been demonstrated that soil acidity is no disturbance to this crop when nourishment is provided for it in the form of lime and fertilizers in the lower depths of the surface soil. Where the fertility was delivered to the plants, the crop in turn delivered the good yields of seed beans.

The reduced yield of soybeans on the untreated parts of the fields in contrast to the much better returns where lime and fertilizers were used, suggest that the untreated soils are slowing down in their mobilization of plant nourishment from the soil minerals to the clay and from there to the plant roots. When slightly more than 10 bushels of soybean seed has been the average yield of the state of Missouri, there

is good warning that the soils are slowing down so much as to be about to take a rest on their own accord from delivering nourishment to the crops.

A COOPERATIVE VENTURE

It is particularly fitting on the more level soils, with their significant amounts of clay in the subsoil that there should be initiated one of the first demonstrations of maintaining and rotating the fertility of the soil with the minimum of it lost from the farms. If the soybeans are processed here and only the oil shipped out, can this soybean venture represent any loss of soil fertility from these farms? What is soybean oil but carbon, hydrogen and some oxygen, all coming from the air and water? Sending these air-given elements to market is no drain on the soil fertility of the community. It is dispatching to distant places only so much good

Soybean plants given extra fertility grow well and rapidly (top right), but without soil treatment many plants are sickly and light colored (circle below).

Photo by A. W. Klemme



Missouri weather. This any one may well, and generously, share with others.

As the oil cake goes from the mill back to the farms to feed livestock, there goes back in it the protein nitrogen taken from the soil. There goes also much extra nitrogen that this legume plant snatched from the unlimited supply in the atmosphere through the help of nodule bacteria as inoculation on the seed. Back to the farm with the press cake will go the extra fertility put on the soil as calcium in the lime, and phosphorus and potassium in the fertilizers to help this legume in running nitrogen-fixing factories on these farms. These fertility elements will go through the animals to supplement the carbohydrate crops as corn and hays fed with it in a balanced ration. The fertility of the corn and hay, too, will be left in a larger measure on the farm.

Here there is being set in motion a community performance of cooperation that should do several things. It will move more

purchased mineral fertility into the soil. It will insert into the crop rotations a legume crop whose nitrogen from the air and other fertility products will completely return to the soil. It will encourage a soil-building program that can deepen the surface soil by building it down into the subsoil. Finally, it will reflect itself in the better reproduction and growth of the animals to say nothing of the sounder health of the people and many other human gains not measured in monetary units.

Here shall be demonstrated a real cooperative venture in soil fertility conservation for community benefit. These soils with their plants, in the animals, and in the people, will do more than bring dollars into the banks and business into the city. They will minister to human health, to contentment, and to the happiness of the community as a whole. Our congratulations go to these pioneers and also our good wishes for their continued success in the constructive venture they have launched in Missouri's northeast prairie section.

be acquired by them if those plants are to continue in full time operation until the 1944 crop season.

The reports of Iowa processors for the first three months, October, November, and December, of the current season show a crush of only 3,000,000 bushels of 1943 crop soybeans while the total of the processor estimated capacities of the 31 Iowa plants for the balance of the season is 17,000,000 bushels.

That looks like a mighty ambitious bean crushing program, but it should be borne in mind that many of the earlier established plants operated on 1942 crop soybeans during last October and into November, and that the majority of the new plants were not yet in production in December. The amount of the 1943 crop crush will depend on how soon those new plants will be in a position to start crushing soybeans and whether the resulting production will measure up to the estimates which have been based on manufacturers' promises of delivery and capacity.

On January 1, 1944, only 9,250,000 bushels of the estimated 39,000,000 bushels of Iowa's 1943 crop of soybeans harvested for beans was in the hands of Iowa processors. That means that if all Iowa processing plants are to continue in full operation until October 10 of the current year on the basis of their estimated capacities, they must acquire an additional 7,750,000 bushels of soybeans, and the January 1 estimate showed only 11,800,000 bushels on Iowa farms.

Much the same soybean stocks and supplies situation exists in the other principal soybean producing states where in the aggregate, on basis of the processor estimated crushing capacities, an additional 30,000,000 bushels of soybeans must be acquired by processors if all midwest plants are to continue in full time operation on the 1943 crop.

The midwest soybean supply problem and your Iowa problem is whether or not those needed amounts of soybeans will be available to processors from marketing of farm and country elevator stocks supplemented from the only other material source of supply until the 1944 crop — the stocks held by Commodity in CCC bin storage, in country elevators under Uniform Grain Storage contracts, and in terminal elevators that purchased and stored soybeans for this Corpor-

Supply Situation

● REPORT BY COMMODITY

By J. H. LLOYD

Assistant Regional Director, Commodity Credit Corporation, at the annual meeting of the Farmers Grain Dealers Association, Fort Dodge, Iowa, Jan. 26.

For use in the crushing of the 1943 crop an estimated annual 20,000,000 bushels of new processing capacity is reported as having been made available to the soybean belt through approval by the War Production Board at Commodity's recommendation of processor applications for essential equipment and materials priorities. Some additional midwest processing capacity has been developed from the "speeding up" of presses already in operation.



J. H. LLOYD

As a result of War Production Board approval of applications for priorities, Iowa now has 31 soybean plants that have executed 1943 crop processing contracts with Commodity as compared to the 12 plants that operated under contract in Iowa on the 1942 crop. The increase in the actual and prospective Iowa soybean processing capacity is from the 10,750,000 bushels crushed for livestock meal from the 1942 crop to the more than 20,000,000 bushels which Iowa processors now estimate they can crush in their plants, during the 1943 season, provided sufficient beans are available for full time operation to October 10, 1944.

As of January 1, 1944, the U. S. Dept. of Agriculture adjusted its earlier estimate of the 1943 soybean crop downward to 195,000,000 bushels. As of the same date, despite an estimated carry-over of 12,000,000

bushels from the 1942 crop the U. S. farm stocks were given as only 58,000,000 bushels.

No estimate of country elevator stocks has yet been announced and if we knew how many "free" beans are in country elevators it might throw some light on the whereabouts of some 10,000,000 to 15,000,000 bushels of the estimated 1943 crop for which so far we are unable to account.

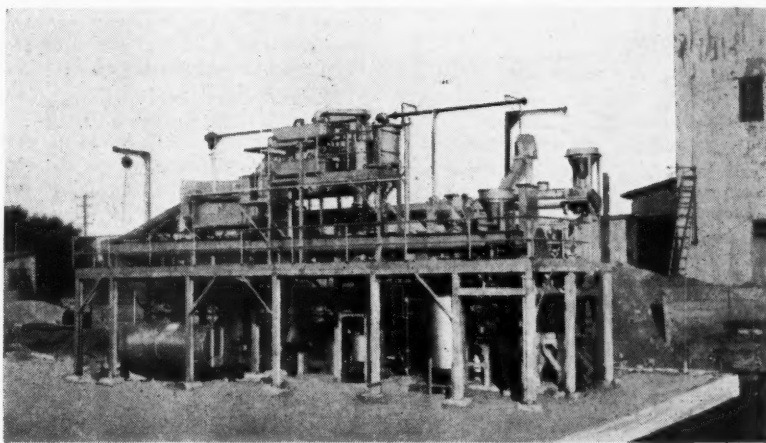
PROCESSING CAPACITIES

Some midwestern processors mostly located in the margins of the soybean belt are already applying to Commodity for soybeans. If all processors who agreed under Commodity contracts to purchase their own beans have correctly estimated their plants' 1943 crop crushing capacities from January 1 to October 10, 1944, their monthly reports to Commodity prove that more than an additional 30,000,000 bushels of soybeans must

OPEN AIR PROCESSING

A solvent extraction plant practically complete without building. This unique photo was made possible by delay in obtaining the second-hand steel structure to cover the unit. It is the new plant of the Indiana Farm Bureau Cooperative to be operated by the Hendricks County organization at Danville, Ind. The plant has a capacity of 10 tons per 24-hour day. It replaces a smaller unit destroyed by fire.

— Mutual Forum Publishing Co.



ation under their 1943 Terminal Elevator Merchandising contracts.

COMMODITY'S STOCK PILE

Commodity's 1943 program of acquiring through terminal elevator merchandising contracts, through purchases by country elevators for storage or for prompt shipment under Uniform Grain Storage contracts, and through the necessary county AAA committee purchases for shipments or for storage in CCC bins or in approved country elevators, resulted in this Corporation obtaining possession during the last harvest season of a very substantial quantity of soybeans, a portion of which, on basis of restricted movement of Commodity's soybean stocks to processing capacity outside of the soybean belt, could be and probably will be later offered to midwest processors who are unable to acquire their stocks from other sources.

All may be assured that Commodity will do everything possible, in consideration of the pressing need for protein feeds in other areas, to keep all soybean processing plants operating just as long as stocks are available and right now it looks like there should be just about enough beans to keep the mills turning out meal and oil until the new crop is available.

FARM STOCKS

Much speculation is being had as to the portion of the estimated 58,000,000 bushels of farm stocks that will move into the processing channel. An opinion recently expressed by one who has had a wide experience in estimating utilization of farm crops held that processors will acquire from the U. S. farm stocks all of the beans left after seed requirements of perhaps 25,000,000 bushels plus farm disappearance of 2 to 3 percent of the U. S. crop for feed, but that view, in our opinion, fails to take into account the probable carry-over due to bullish price sentiment and to the feeding of soybeans by farmers who are now and may for some time continue to be unable to acquire sufficient protein supplement feeds to meet their needs.

One hundred three midwest plants have entered into 1943 soybean processor contracts with Commodity compared to 68 that operated under 1942 contracts. There are seven Pacific Coast plants that are operating on beans grown west of the Mississippi River. One hundred seventy-eight processing plants located in southern states have contracted to process Commodity owned beans during the current season, and five additional processing plants in the south are operating under the so-called midwest contract on beans purchased by them in the north.

Our Chicago office does not have a record of the number of cotton states processing contracts for 1943 since those contracts are administered by the New Orleans office. However, we have heard it estimated that around 3,000,000 bushels of southern grown soybeans may be processed under those 1943 contracts.

It now appears to be as good a guess as any that movement of farm stocks, plus sale to needy midwest processors of most of the currently free stocks now held by Commodity, should serve to supply sufficient beans to enable full time operation of practically all midwest plants on 1943 crop soybeans well into and perhaps through next September.

In view of the currently fast moving adjustment by U. S. farmers of their livestock numbers to feed supplies and prices, it now

appears that the long standing and still generally critical protein supplement feed shortage, which necessitated the currently operative allocation to Commodity under War Food Administration order of 20% of the January and February oilseed meal production of all processors for distribution through state and county Agricultural Conservation Committees, will be materially relieved before summer.

— s b d —

THE BEAN CROP IN THE DELTA REGION

"Last week, in making a tour of the Delta region in Mississippi, I had occasion to talk to many planters who last year grew commercial sized soybean crops for the first time," reports P. R. Farlow, general agricultural agent for the Illinois Central Railroad.

"While the late drouth brought discouraging results in yields to many, it caused some to cut the crop for hay, yet many of the planters secured yields from 30 bushels upward.

"Generally speaking, I found the better yields located on plantations which had their own combines and were, therefore, able to combine their crop at the proper time.

"I did find some planters disappointed because of weedy stands and inability to properly combine and get the crop out at the right time. However, these mistakes and disappointments were very similar to those experienced by Illinois and Iowa growers during the early years of the crop in the Cornbelt.

"I believe the majority of the planters in the Delta will answer the government's appeal for more beans by again planting approximately the same acreage as last year."

"The Protein Mess"

● AS SEEN BY MIXERS

To the Editor:

I gladly accept your offer to allow me space in *The Soybean Digest* to reply to the editorial, "Protein Mess," in your January issue.

The first growing of the soybean in this country was for hay and very little progress was made in growing for beans until Mr. H. G. Atwood of Allied Mills guaranteed the farmers \$1.50 per bushel. This gave the farmers a guaranteed volume outlet and it was from this point that the rapid progress in acreage expansion started.

The early processors of beans did try to sell meal to the feeders with little or no success and it was only due to the fact that the mixed feed industry saw the value of this protein and incorporated it in their formulas that the grower had a ready market.

During the free trading years, due to the farm storage problem 75 percent of the crop moved to market during the months of October and November. In order to absorb this large movement, soybean processors had to hedge their position by long term contracts for meal. Fully 75 percent of this meal hedging was absorbed by the mixed feed industry. It is a well known



— U.S.D.A. Photo by Forsythe

SOY NOW USED IN SCHOOL LUNCHES

The young lady above should not lack for proteins in her school lunch from now on. At least she should be well exposed to them, for the U. S. Department of Agriculture includes seven full pages of recipes featuring soy flour and grits in its recent Miscellaneous Publication No. 537, *School Lunch Recipes*.

The recipes using the flour and grits include meat loaf and balls, beef or lamb stew, soya scrapple, creamed dried beef with soya, soya-egg roll, codfish cakes, soya and corn pudding, cottage cheese loaf, soya brown bread, creamed potatoes, vegetable chowder, cornstarch pudding, and potato soup. These are all prepared in quantities of from 12 to 50 servings.

fact that in the state of Iowa large percentages of your small production of meal had to find markets further west.

It is therefore clearly established that the mixed feed industry has and will in the future play a major part in the united drive to maintain a thumping big acreage of soybeans as a permanent cash crop.

I was so surprised to learn in the editorial, "Protein Mess," that feeders could buy all the mixed feeds they wanted that I called many of my mixed feed manufacturing friends. All were rationing their feeds, all were having a terrible time getting raw materials. So I must conclude somebody had a wild dream.

It is a well known fact that the prosperity of war always creates mass conversion to the use of new commodities. The whole future of the soybean is too clear to be misunderstood or ignored by the growers of the Cornbelt. If after the war feeders return to their old feeding habits the only salvation of the growers' market will be the mixed feed manufacturer.

C. F. Marshall
Allied Mills, Inc.
Chicago, Ill.

SOYBEAN DIGEST

To "Up" Production

● INOCULATE AGAIN IN 1944

situation, *The Soybean Digest* is again urging that attention be given to the production of every possible bushel of beans from the acreage planted, as was done last year. This publication is again participating in a campaign to insure inoculation of every bushel of beans planted this spring as the most effective and economical insurance of maximum production. This campaign is being undertaken with the cooperation of AAA committeemen, county agents and vocational agriculture teachers.

Last year the U. S. Department of Agriculture stressed the need for general legume inoculation in its production campaigns. Geo. M. Strayer, secretary of the American Soybean Association, has written a letter to M. E. Dodd, AAA administrator, suggesting that this step be taken again this coming season. It will be found below.

If the 2 million new acres hoped for by the Department of Agriculture are actually brought into soybean production it will be

doubly imperative to inoculate with the proper strains of bacteria all seed planted in these new acres, since such bacteria are not naturally present in soil where soybeans have never been grown.

Oldtimers recall that first attempts in this country to grow soybeans, which are not native to America, were unsuccessful until the need for inoculation was recognized and the soil became impregnated with the bacteria that reside on soybean roots, or that bacteria were introduced from outside sources through proper inoculation. The same result will be found on any new soil that has not grown soybeans before.

This publication wishes to see everything possible done to bring about attainment of 1944 soybean acreage goals. But planting the required acreage is not enough. Use of the best possible growing practices is also necessary if we are to produce more soybeans in 1944 than were grown in 1943.

Letter to Administrator Dodd

AMERICAN SOYBEAN ASSOCIATION

Hudson, Iowa

February 15, 1944

Mr. M. E. Dodd, Administrator
Agricultural Adjustment Administration
U. S. Department of Agriculture
Washington, D. C.

Dear Mr. Dodd:

Last year local and state AAA committeemen, at the behest of M. C. Townsend, then director of the Food Production Administration, stressed to growers in their respective districts the need for proper inoculation of soybean seed. This was part of the campaign to obtain the utmost in soybean production from the available acres. The committeemen used the information available from their state experiment stations, the agricultural extension services and other local sources. We supplied further information from here.

May I suggest that it would be advantageous for you to take a similar action this year? That if more soybeans are to be produced in 1944 than in 1943 it is imperative that the best cultural methods be applied to the acres planted?

I believe there are several good reasons for such a step:

1. The uncertainty that soybean acreage goals actually will be attained. The belief is quite prevalent in the Midwest that farmers may cut rather than increase soybean acreage. A careful survey taken by *Prairie Farmer* indicates this. Therefore it is highly imperative that the utmost in production be insured from every acre planted.

2. If the requested acreage is planted, many acres are certain to be planted to soybeans that have never grown the crop before. The soybean is not a native to America, and the nitrogen-fixing bacteria which inhabit the soybean root system must be introduced from outside sources if the crop is to be successfully grown on new land.

3. If an acreage subsidy payment is made, as has been suggested, there will be a tendency for farmers to shift the soybean crop to less fertile land than is normally used for the crop. It is even more imperative that beans planted on the less fertile soils be inoculated if a satisfactory crop is to be produced.

4. It is generally recognized by experiment stations that proper inoculation of soybean seed, even on land that has repeatedly grown the crop, will pay dividends. Practical growers consider inoculation good insurance at the low cost of 10 to 15 cents an acre. But many farmers are now growing soybeans for the first time and are not familiar with the best cultural practices, including inoculation. This information should be made available to them.

We cannot afford to overlook any single step that might increase 1944 food production. I welcome your views on this proposal.

Very truly yours,

GEO. M. STRAYER, Secretary
AMERICAN SOYBEAN ASSOCIATION

FROM COLONEL to general! The soybean has again advanced in rank in the Food-for-Freedom campaign. Yet it is not at all certain that this rank can be retained.

The 1943 soybean acreage harvested was 10.8 million acres. The goal set by generalissimos in the Department of Agriculture is 19 percent higher this year. The increase asked in Iowa is steeper — 47 percent. In some Iowa counties goals are actually advanced 400 percent over 1943 production.

Farmers generally have expressed themselves as feeling that considerable incentive should be offered to bring about the radical adjustment in farm rotation that would be necessary to meet 1944 soybean goals. The American Soybean Association directors took the lead in December in petitioning governmental agencies for a support price of at least \$2.50 per bushel.

SURVEY

As the local AAA committeemen go out in the townships asking for signups the general feeling is that the 14 cent increase in the price actually announced fell far short of the mark — and evidence accumulates that the production goals may not be met. A survey conducted in January by *Prairie Farmer* indicates that while in general farm production goals will be met, *soybean acreage may actually be cut by 2 percent in 1944, instead of increased by 19 percent.*

Wallaces' Farmer says: "This price isn't high enough to secure the acreage needed in 1944. With corn loans around 90 cents and most farmers confident of dollar corn, it will take a bean price of \$2.25 to secure an increase in acreage."

"It is another case of too little and too late," declares J. E. Johnson, president of the American Soybean Association. "Instead of an acreage boost, there will be an actual decrease."

Yet the urgent need of meeting government soybean goals is apparent to all. War Food Administration is depending on an increase in soybean production to ease the fats and oils situation. And with feeders getting only four pounds of protein for every five needed, now is certainly no time to ease up on soybean production.

Growers express the opinion that if a way out is sought by supplementing the support price with a subsidy on the acreage basis, as has been suggested within WFA, the result might be many soybeans grown on poorer land with the acreage goals being met without an actual increase in soybean production.

To salvage as much as possible from this

FEBRUARY, 1944

LEND-LEASE TAKES SOYA TO

Starving Peoples

Soya, the soft, Oriental name applied to the nutritious food products made from American soybeans, is going to war in a big way, and in so doing is providing a proving ground for an infant, domestic industry that holds infinite possibilities for the future.

Millions of pounds of American-produced soya products are being shipped overseas by lend lease to lend fighting strength to Allied armies and to help mend the broken health of subjugated peoples as Nazi-occupied countries are liberated.

Why Risk \$10.00 to Save a dime?

A good crop of soybeans will grow on good land without proper inoculation—but it grows at an extra cost of at least \$10 per acre in nitrogen taken from the land.

Neither prior crops nor the presence of nodules guarantee the proper inoculation necessary to take this nitrogen "Free From the Air."

Always Use



INOCULATION

"THE PEER OF THE BEST"

Guarantee proper inoculation at a cost of only pennies per acre

TOP RANKING QUALITY AT NEW LOW PRICES

2 bushel size.....	\$.30
5 bushel size.....	.45
25 bushel size.....	1.95
30 bu. size (6-5 bu. cans)....	2.60

KALO INOCULANT COMPANY
QUINCY, ILLINOIS

Soya is on the eastern battlefield with the victorious Russian legions. It is helping to feed the mouths of the hunger-ridden Greeks. It's in the prison camps of the beaten Nazi armies, waiting only for the war to end.

Soya is bringing, or soon will bring, the cereal-eating, fun-loving peoples of southern Europe, who never had a stomach for this war, a richer, higher protein content spaghetti than they ever had before. Soya goes with the Red Cross, with lend lease, into so many parts of the world that its name has to be spelled in 15 languages.

The soya products section of War Food Administration's office of Distribution, which plans soya procurement programs, advises on purchases, and knows more about soya than anyone else in Washington, gives these figures on total soya purchases (exclusive of army) for overseas shipments:

Concentrated cereal foods containing soya, 19,119,520 pounds.

Dry soups containing 25 to 30 percent soya, 56,504,000 pounds.

Dry cheese mix, 6 million pounds.

Dry stew mix with 20 percent soya, 4,032,000 pounds at the rate of approximately 672,000 pounds a month for the last six months.

Soya flour, most of which is destined for Great Britain and Russia, 211,328,000 pounds — purchased since the fall of 1941.

Soya grits, 108,580,000 pounds.

Soybeans, mostly for Great Britain, 104,463,000 pounds — purchased since July, 1941.

An the comparatively new, high protein spaghetti, destined for the spaghetti-eating

countries of southern Europe, more than a million and a half pounds.

Soya must be packaged in specially-prepared, moisture resistant containers for overseas shipment. Each new product is tested for acceptability, and preparation directions must be printed on the packages in 14 languages besides English.

REQUIREMENTS

Here are the Office of Distribution's requirements for overseas shipments for relief feeding:

(1) Products must be composed of basic commodities in relatively ample supply.

(2) They must be processed with existing facilities or require little conversion.

(3) They must have long storage life under a wide range of conditions, must require no refrigeration.

(4) They must be packaged in relatively non-critical materials.

(5) Export containers must meet Army specifications: maximum weight must not exceed 100 pounds, should be under 50 if possible.

(6) No special equipment or facilities must be required for preparation. Cooking time should be short, directions for preparations simple.

(7) The foods must have a high nutritive value in relation to space, weight, and price.

(8) The foods must be palatable and acceptable to the people receiving them.

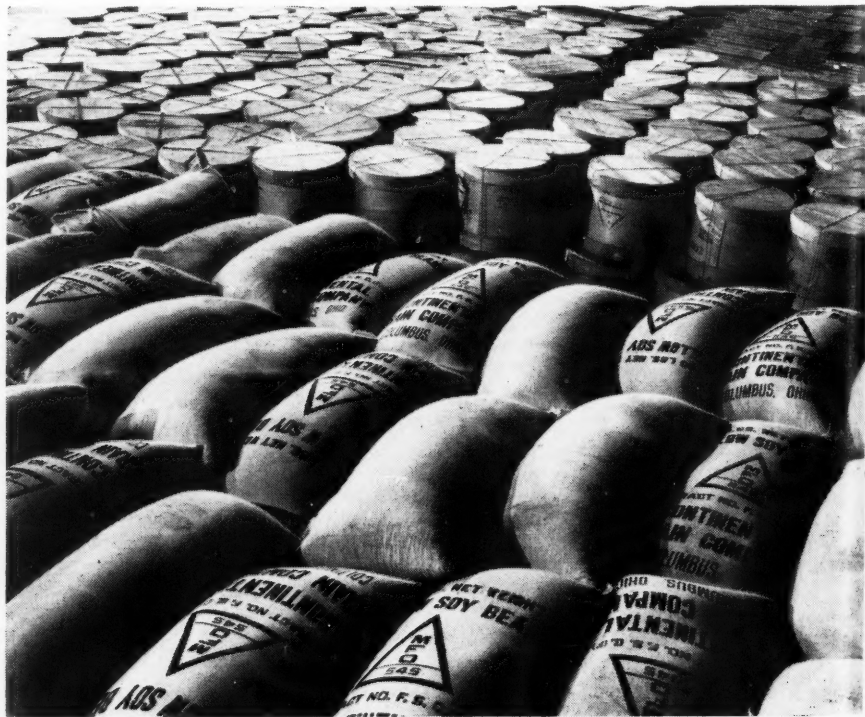
But the story of soya and the war is more than a parade of statistics and a set of regulations. It is the story of a baby industry learning how to walk and of awkward parents learning how to manage it.

The soya food products industry in the United States is only about eight years old, though nutritionists saw the possibilities of the soybean many years before.

The big soybean producers, with outstanding exceptions, were accustomed to dealing in bulk sales of the raw product, were slow to vision the future that lay before

Ohio soybeans and Wisconsin cheese await loading on a United Nations freighter that will carry them as part of a lend-lease shipment to one of our allies.

— Official OWI photo by Palmer



them in volume sales of packaged soya foods.

But with the outbreak of war, with a big demand for low cost, abundant, high protein foods, the research laboratories have worked overtime, new soya products have been developed, old ones improved, and the industry generally has boomed.

This wartime expansion is not only helping to solve the food problem of our Allies — it is building up a backlog of research and experience, and resulting in the development of improved foods which can lay the foundation for an expanded domestic industry in the post-war period.

POST-WAR

Just what is the future for soya?

"That," says Donald S. Payne, chief of the soya products section of the Office of Distribution, "depends upon the ingenuity, the will, and the imagination of the American people.

"One of the most significant signs is that the war-time demand for soya has awakened the interest of big time processors in the development and merchandising of new products.

"Soya stacks up in nutrition, availability, and low cost. The problem of palatability is solved. Soya foods are now readily acceptable to most people. In another six months we'll know as much or more about soya as we do about any other food.

"When it comes to deciding what to do with our tremendously expanded production of soybeans, it will be these new products — developed, tested, improved and used during wartime — that can step in and take up at least some of the slack.

"Meantime, an educational program will soon be under way to tell the American people what protein is, why it is needed, and what foods they can depend on for it. Soya will have a part in this program.

"The most significant fact about the soya industry is that we have developed a low cost, abundantly available, highly nutritious food ready to throw into the breach in the event of an economic collapse.

"People went hungry during the last depression not because they didn't have a nickel, but because they didn't have a dollar. Development of the soya food industry means hedging our country against a collapse in health."

Turn these facts over in your mind: A new food high in nutritive value, abundant in supply, low in cost. The possibilities for this combination in a world-wide program of nutrition staggers the imagination.

THE CROP'S BIG...

THE DEMAND BIGGER!

The 1942-43 soybean crop was double that of the previous year. Next year's crop is estimated at even more than the 1942-43 record. And still supplies will be limited in the months ahead... because war demands are so great.

But we... that means you and us... can work it out together, stretch those supplies so they're equally shared by all. One way you can help is to remind customers how to make soybean oil meal go further. Ask them if they're putting pigs on good pasture, restricting soybean oil meal in fattening

rations... after pigs have reached 75 to 100 pounds. Or maybe they're feeding production rations to dry stock. Mention how this wastes valuable protein.

Customers know about these and many other conservation methods, but occasionally need reminding. Tell them, too, that the U. S. Department of Agriculture has a very useful bulletin on the "Government-Industry Protein Conservation Program." Contains lots of helpful and practical suggestions on conserving protein-rich feeds. They can get the booklet from Washington.



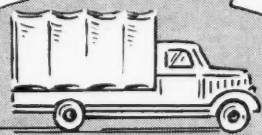
GUARANTEED
Old Process
43% Protein

**Swift
& Company**

MILLS AT

Champaign, Illinois Cairo, Illinois
Des Moines, Iowa Fostoria, Ohio
Blytheville, Arkansas

**Used
COTTON & BURLAP
Bags**



**WATERPROOF
TARPAULINS
IN ALL SIZES FOR
TRUCK COVERS**

**IN THE BAG BUSINESS
FOR MORE THAN
32 YEARS**





GRITS AND FLAKES



FROM THE INDUSTRY

The 10th annual Farm Chemurgic Conference will be held at St. Louis, March 29-31, with headquarters in Hotel Statler, Managing Director Ernest L. Little has announced. Of special interest to soybeaners will be discussion of the present soybean situation by Lamar Kishlar, president of the Soybean Nutritional Research Council; and the full story about the new soybean fiber by Robert Boyer of The Drackett Co. There will be a session devoted to plastics and one with the theme of chemurgy

throughout the world, with representatives from five foreign countries discussing their respective chemurgic problems.

The Central Soya Co., Fort Wayne, Ind., has announced the organization of a new department of agronomy. The new department will direct its attention to problems of production of soybean crops, the study of new soybean varieties and the development of new varieties, as well as to problems of fertilization, cultivation methods and weed control. Experiments will be conducted on 6,000 acres of farm land owned in northern and north-central Indiana by the Central Sugar Co., which is affiliated with the McMillen interests and of which Central Soya is a part. J. Ward Calland, vice-president and member of the board of directors of the Central Sugar Co., is the director of the new agronomy department.

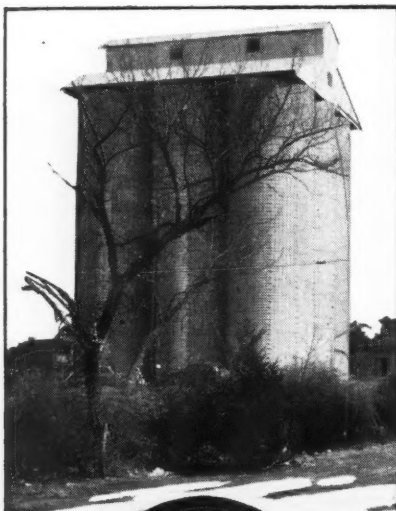
Plans have been made to hold the 35th Annual Meeting of The American Oil Chemists' Society in New Orleans, La., May 10-12. The Roosevelt Hotel has again been selected as headquarters for the convention. The local committee headed by Dr. George W. Irving, Jr., of the Southern Regional Research Laboratory, New Orleans, La., is arranging a balanced program which will include chemical, analytical, technological, industrial and economic phases of fats and

oils. Hotel reservations should be made as soon as possible through Roy R. Bartlett, convention manager of the Roosevelt Hotel.

The condition of Roy H. Monier, Missouri director of the American Soybean Association, who suffered a stroke January 11 while conducting a soybean meeting at St. Joseph, Mo., is showing considerable improvement, according to latest word reaching *The Soybean Digest*. Mr. Monier has recovered sufficiently to be removed to the hospital at Carrollton, his home town, and is regaining use of his right side, it is reported.

About 100 interested farmers, county agents and other interested persons attended a soybean meeting sponsored by the Sioux City, Iowa Chamber of Commerce at that city January 31. Speakers included Don Walker, manager of the Ralston Purina Co. Iowa Falls plant; H. D. Hughes, head of the farm crops department, Iowa State College; Clarence Shanley of the experiment station at Brookings, S. D.; and E. S. Dyas, extension agronomist at Iowa State College.

A new process for making confections from soybeans is disclosed in Patent No. 2,329,080, granted to Charles A. Raymond of Marion, Ohio. The beans are parboiled in sodium bicarbonate, puffed, heated, and otherwise treated to remove their oil content and provide a crunchy, digestible, nut-like product.



NEFF & FRY STORAGE BINS

SOYBEAN STORAGE

Each month the lowly soybean grows in importance—new uses are found, more storage problems arise.

Storage need be no serious problem to those with proper priority rating—or to any other grower or elevator, in post-war days.

Bins of any required diameter or height. Stave or monolithic.

Send for catalog. Plan now so you can build at earliest opportunity.


THE NEFF & FRY CO.
CAMDEN, OHIO

One Way to Conserve

SOYBEAN PRODUCTS

27 Conveniently
Located Offices
and Factories

BUFFALO
TOLEDO
PHILADELPHIA
CHAGRIN FALLS
GOSHEN, IND.
MILWAUKEE
MINNEAPOLIS
KANSAS CITY
NEW ORLEANS
JACKSONVILLE, FLA.
DALLAS
ST. LOUIS
CHICAGO
NEW YORK
DETROIT
CLEVELAND
ORLANDO, FLA.
PORTLAND, ORE.
DENVER
PITTSBURGH
OKLAHOMA CITY
SALT LAKE CITY
BOISE
MEMPHIS
HUTCHINSON
REIDSVILLE, N. C.
HARLINGEN, TEXAS



Today, when conservation of vital soybean products is a matter of national concern, you owe it to your fellow countrymen to safeguard your shipments in every way possible.

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IOWA AND ILLINOIS

Contest Winners

Bert Kinsinger of Grundy Center is the winner of the third annual Iowa five acre soybean yield contest as announced by Joe L. Robinson, secretary of Iowa Corn & Small Grain Growers Association at Iowa State College Farm and Home Week, February 7.

Mr. Kinsinger's five acres of Mukdens yielded an average of 38.72 bushels per acre, which tops the 37.77 bushels of R. G. Stoakes, Traer, and the 33.83 bushel yield of Frank Aliger, Paton, 1942 and 1941 first place winners respectively. To Mr. Kinsinger goes the John Sand trophy awarded for the second time.

Closely pressing Kinsinger for first place honors was W. O. Barnard, Cedar, with a field of Dunfields going 38.30 bushels. Third place went to Clinton Critser, Conrad, with Richlands averaging 34.83 bushels; fourth to R. W. Dunham, Dunlap, with Mukdens averaging 32.70; and fifth, to Fred Coulter, Conrad, with Richlands averaging 32.38.

Other Iowa contestants with high averages included: Elton Schultz, Woodward, with Mukdens; Gay Coulter, Conrad, with Manchus; Herman Schiernbeck, Kiron, with Richlands; Herman Grabau, Boone, with Richlands; and Frank Randell, Cedar, with Illini.

ILLINOIS WINNERS

Following are the results of the 1943 Illinois 10-acre soybean growing contest:

First Place — J. L. Trisler, Fairmont, Vermillion county, Illinois.

Yield—39.36 bu. per acre Cost \$230.98
Oil Content—20.2% Cost per bu.—\$.5868
Quality 81.8
Total Score — 96.31%

Second place — Howard J. Bacon, Roseville, Warren county, Illinois.

Yield—39.01 bu. per acre Cost—\$251.78
Oil Content—20.0% Cost per bu.—\$.6454
Quality—88.8
Total Score — 94.96%

Third Place — C. F. Davis, Sullivan, Moultrie county, Illinois.

Yield—34.95 bu per acre Cost \$244.03
Oil Content—21.2% Cost per bu.—\$.6982
Quality—91.0
Total Score — 93.01%

Trisler's yield of 39.36 bushels per acre was a drop of 13.55 bushels per acre from the 1942 high yield of 52.91 bushels. The average yield of all contestants for 1943 was 34.45 bushels per acre, or approximately five and one-half bushels under the 1942 average.

Trisler's 60-acre field on which his record was kept, was planted with Chief soybeans. He used his own certified seed. The total net weight of the beans taken from 36½ acres of the field was 81,750 pounds. They were planted in rows 40 inches apart with an average space of .9 inches between each plant in the row. He planted this field on June 9 and 10 and used one bushel of seed per acre. The field was planted in corn last year; soybeans year before last; and wheat three years ago. The soil had been limed

but not phosphated. Fertilizer was applied in 1942, but none in 1943. There was humus inoculation. The field was disced before plowing in April and then disced again before planting.

Appropriate awards of sterling silver were presented to the three winners of the contest at the annual banquet of the Illinois Crop Improvement Association on February 9, during Illinois Farm and Home Week.

PROCESSORS MEET FEB. 24

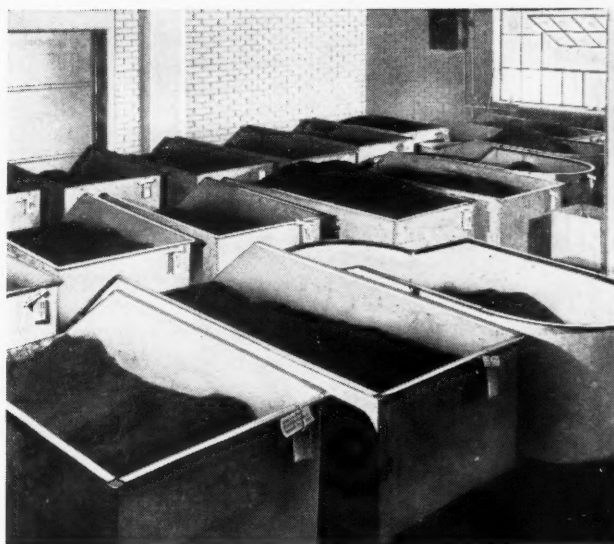
Soybean production and processing problems will be discussed in a conference of staff members of the University of Illinois College of Agriculture and representatives of processing organizations to be held in Urbana, Ill., on Thursday, February 24, according to an announcement by W. L. Burlison, head of the department of agronomy.

Speakers will include Edward J. Dies, president of the National Soybean Processors Association; W. J. Morse of the U. S. Department of Agriculture; Lamar Kishlar, Ralston Purina Company; D. J. Bunnell, Central Soya Company; and Dean H. P. Rusk of the Illinois College of Agriculture.

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These bins are kept here for several weeks while the "pre-testing" program is carried on . . . a program of making an exhaustive re-check in the laboratory and greenhouse. Before being released for shipment, every lot must meet these severe check-and-double-check standards.

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Cake

THIS recipe makes a gold cake that is light, fluffy and delicately textured — a really praiseworthy cake. Soy flour is used to make the cake tender and it also adds nourishment — soy flour made from soybeans is classed along with milk, eggs, meat and cheese as a protein food.

While a "sweet" at the end of a meal helps to satisfy the appetite, there is no objection to the adding of a new ingredient which also adds to the nourishment of this delicious cake.

Although soy flour is entirely different from wheat flour, it, like wheat flour, packs as it stands and to avoid over measuring it must be sifted before it is measured.

Soy flour is a new product to most people. When it is used measures and directions for combining it with other ingredients should be accurately followed.

Gold Cake

(Makes 2 layers)

- 1/2 cup butter or margarine
- 1 cup granulated sugar
- 4 egg yolks
- 3/4 cup soy flour
- 1 3/4 cups cake flour
- 2 teaspoons baking powder
- 1/4 teaspoon salt
- 3/4 cup milk
- 3/4 teaspoon lemon extract

Cream butter or margarine. Blend in sugar gradually. Beat egg yolks until thick and add to creamed mixture. Mix thoroughly. Sift soy flour and the cake flour separately. Measure and sift together with the baking powder and salt. Add dry ingredients alternately with the milk and vanilla extract to the creamed mixture. Pour batter into two eight-inch layer cake pans which have been lined on the bottom with wax paper and then greased. Bake in a moderate oven (350°F.) for 25-30 minutes. Put layers together and top with any desired frosting.

This cake has an exceedingly soft and fine texture. While there is a cup of sugar in the cake the frosting suggested takes none.

Pastel Frosting

- 3/4 cup tart jelly
- 1 egg white, unbeaten
- 1/8 teaspoon salt

Place jelly, unbeaten egg white and salt in the top of double boiler over gently boiling water and beat with a rotary beater until the jelly melts and blends into the egg white. Remove top of double boiler from heat and beat until the frosting is stiff enough to stand in peaks. Spread on cake.

Jelly Jumbles

(Makes 12 2 1/2 inch Jumbles)

- 1/2 cup soy flour
- 1 cup enriched flour
- 1 teaspoon baking powder
- 1/4 teaspoon salt
- 1/2 cup shortening
- 3/8 cup sugar
- 1 egg, well beaten
- 1 teaspoon vanilla
- 1/2 cup jelly

Sift soy flour and enriched flour separately. Measure and sift together with the baking powder and salt. Cream shortening and sugar until light and fluffy. Add beaten



— A. E. Staley Mfg. Co.

egg and mix well. Stir in vanilla. Stir in dry ingredients in about three portions, blending well after each addition. Divide dough in half, roll each portion on a lightly floured board to a thickness of about 1/8 inch. Cut with a cookie cutter. Put one-half of the rounds on a greased baking sheet, place about a teaspoon of jelly on each and top with the remaining rounds. Press edges together with a fork. Bake in a moderately hot oven (375°F.) for 12 to 15 minutes.

This is a delicious company confection. It makes a little jelly go a long way.

Egg Nog

(Serves 4)

- 2 eggs separated
- 4 teaspoons soy flour
- 2 cups milk
- 1/2 teaspoon vanilla
- 8 teaspoons sugar
- Nutmeg

Beat egg yolks until light. Beat in soy flour, a teaspoonful at a time. Add milk slowly, beating after each addition. Add vanilla. Beat egg whites until they hold a peak. Add sugar slowly, beating constantly. Fold egg whites and sugar into the milk mixture and pour into glasses containing ice cubes. Top with a sprinkling of nutmeg and serve at once. A nourishing beverage for an after school snack for the children.

Soy Rolled Sugar Cookies

(Makes 4 dozen)

- 1/2 cup shortening
- 3/4 cup sugar
- 1 egg
- 1 cup sifted soy flour
- 2 cups sifted white flour
- 1 teaspoon baking powder
- 1/2 teaspoon salt
- 1/4 teaspoon soda
- 1 teaspoon nutmeg
- 1/4 cup sour milk or buttermilk
- 1/2 teaspoon vanilla extract
- 1/2 teaspoon lemon extract

Cream shortening. Add sugar gradually, creaming after each addition. Add egg and beat until well blended. Sift together all dry ingredients. Combine sour milk and extracts and add alternately with dry in-

gredients to creamed mixture. Roll out on a lightly floured board. Cut with cookie cutters of desired shape. Place on a greased cookie sheet, sprinkle with sugar and bake in a hot oven (400°F.) for 8 to 10 minutes.

Soy Currant-Nut Bread

- 2/3 cup soy flour
- 1 1/2 cups enriched flour
- 2 teaspoons baking powder
- 1/2 teaspoon nutmeg
- 1/2 teaspoon salt
- 1/2 cup sugar
- 2 tablespoons shortening
- 3/4 cup currants
- 1/2 cup nut meats, broken
- 1 egg, well beaten
- 3/4 cup milk
- 1 teaspoon grated orange rind
- 1 teaspoon orange juice

Sift soy flour and the enriched flour separately. Measure and sift together with remaining dry ingredients. Cut in shortening. Add currants and nut meats. Combine well beaten egg and milk and add to first mixture. Add orange rind and juice and mix well. Place in a well-greased loaf pan. Bake in a moderate oven (350°F.) for 50 minutes.

This bread retains its freshness well and cut thin is especially nice for sandwiches.



— Courtesy Prairie Farmer.

Everything is soy nowadays.

Price

Support

There is an outside chance that War Food Administration may increase its support price on the 1944 crop of soybeans at least to \$2 a bushel, possibly higher.

Food Administrator Marvin Jones has announced a support price figure of \$1.94 a bushel, has taken care not to antagonize Congress on the subsidy issue, and has passed the word along to agencies working on methods for handling support price programs not to tamper with price.

But in WFA offices in the U. S. Department of Agriculture the \$1.94 figure already has been tagged the "bargain basement" price. And there is an under current of feeling here that the support price for soybeans is among those that will have to be adjusted if 1944 goals are met.

Pressure for an upward adjustment already has been started in some quarters of Congress. A delegation from Iowa, Nebraska and Minnesota, headed by Rep. John W. Gwynne (R-Ia.), met with Jones late last month to discuss a higher support price. Congressman Gwynne has sounded out farm leaders in his district, and answers to his questionnaire received to date indicate they want a support of from two and a half to three times the price of corn, his office told *The Digest*.

Congressman Gwynne plans to meet again with the Food Administrator when the replies to his query are all in, but it was considered doubtful that Jones would agree to an increase of that size.

Flour

Hearing

No permanent standards governing the use of soya flour in white bread can be expected from Food and Drug Administration until after the war and the whole question of bread standards has been re-examined.

Meantime, the proposed order to limit the use of soya flour to 1/2 of 1 percent remains in status quo, but will not be put into effect without full hearings. This was the substance of a *Digest* interview this month with W. G. Campbell, commissioner of Food and Drug Administration.

Food and Drug is reluctant to re-open the hearings on the proposed order because of the expense, time, limitations of authority, and legalistic red tape involved. Campbell said "our authority does not permit us to take into consideration a great many things involved — and it would take us a year to get this straightened out."

Food and Drug still hopes that War Food Administration, operating under war time powers, might set up "emergency" standards for the duration of the war. But the *Digest* learned that WFA attorneys who have explored this possibility doubt that the agency has the legal authority.

Barring unforeseen developments, the feeling grew here this month that the question would hang fire for the duration, with the baking industry meantime under no limitation on the use of soya flour.

Margarine Allocation

War Food Administration's allocation of fats and oils for the production of margarine will make slightly more available for American civilians in 1944 than last year — 3.6 pounds per person compared with an estimated per capita consumption of 3.3

pounds in 1943, and a five year (1935-39) average of 2.3.

Out of a total margarine allocation of 616,300,000 pounds, fat content, 75.6 percent, or 466,000,000 pounds, were allocated for civilian consumption; 24.2 percent (149,300,000 pounds) for lend lease and other exports; and 0.2 percent (1,000,000 pounds) for the armed services.

The civilian allocation for the first quarter of 1944 was increased to 120,000,000 pounds, fat content — 20 percent over the last quarter.

Though there is a difference between allocation and final consumption, WFA's Office of Distribution said the increase in margarine

ine, coupled with the decrease in butter, indicated a slightly higher level of margarine consumption throughout the year.

WFA's announcement carried a note of caution against over optimism about the over all supplies of fats and oils for domestic consumption this year.

The announcement cited an improvement in supplies after two years of war, but declared that "requirements will be larger in 1944 than they were in 1943. It is possible that the domestic supply situation for fats and oils, after becoming somewhat easier in the next few months, may grow more stringent again before the end of the year."



"Caught me milkin' ... and thinkin'"

"Milkin' time's about the only chance a fellow has to think. nowadays. Too busy, rest of time, producing food and thins to win the war.

"Thinkin' mainly about feed . . . how I'm going to get by on less and still produce more. Started to raise Cain with the processing mill to try to get more meal . . . then realized they can't help it; they sure can't produce more than we farmers grow. And they've got to spread it out, so that I'll get my share and the other neighbors get theirs, too . . . without anybody getting too much.

"So, I made up my mind that my soybeans will be delivered to the elevator as soon as possible . . . then I'll figure out how little meal I can get by on . . . not ask for more than that . . . and find out from the County Agent how to produce more on less."

HOOSIER SOYBEAN MILLS

MARION, INDIANA

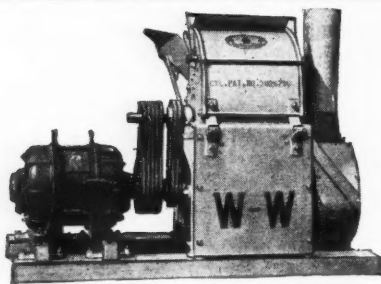
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W-W. Grinder Corp.

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WANTED BY THE F.B.I.



WANTED BY THE F.B.I.

Jacob Harry Lubetkin, with aliases, Jack Bell, Mr. Blue, Henry Bradley, Henry J. Bradley, Harry Brookins, Henry Fallow, Harry Fisher, Harry Harris, Joseph Henderson, Harry Hooper, H. Lambert, Henry Lambert, Henry J. Lambert, Harry Lipshitz, H. Lovering, Henry Lovering, Henry Lovett, Harry Lubetkin, Harry Jacob Lubetkin, Harry Sanger, Jay Jacob Sheldon, Harry Sutherland, Harry H. Sutherland, Harry Waters, Harry Watters.

Lubetkin, using the name of Harry Sutherland, operated the Bulkee Packing Company in Chicago, Illinois, from August to December 1942. During this time, he manufactured Coffee Stretcher, Food Stretcher, Imitation Olive Oil and a Colo Concentrate. From January to July of 1943, as Jay Jacob Sheldon, he operated the Sheldon Products Company, San Francisco, California. After operating these companies for short periods of time, he disappeared leaving considerable debts. On June 17, 1943, a Federal Grand Jury at Chicago, Illinois returned an indictment against the subject of Harry Sutherland for concealment of assets from a trustee in bankruptcy. On August 4, 1943, a Federal Bench Warrant was issued for his arrest.

During the operation of these companies, Lubetkin made considerable use of soybeans and for the past few years has evidenced great interest in soybean products of all kinds. Lubetkin is a skillful promoter, a smooth talker, with an ingratiating personality that will easily gain the confidence of others.

In the event you are contacted by this man, it is requested that you inform the nearest office of the Federal Bureau of Investigation.

Lubetkin is described as follows: Name, Harry Jacob Lubetkin, with alias; age, 48 (born, New York City, June 15, 1895); height, 6'1"; weight, 210 lbs.; eyes, hazel; hair, dark brown; complexion, dark; nationality, American; characteristics, wears heavy lensed glasses; subject to severe attacks of back pains which leave him weak and helpless; walks with "prison shuffle."

Market Street

We invite the readers of THE SOYBEAN DIGEST to use "MARKET STREET" for their classified advertising. If you have processing machinery, laboratory equipment, soybean seed, or other items of interest to the industry, advertise them here.

Rate: 5c per word per issue.
Minimum insertion \$1.00.

FOR SALE — Certified Chief Soybeans. 99.9% Field Purity. Write for carlot and less than carlot prices. Ainsworth Seed Company, Mason City, Illinois. Specialists in the Production of Certified Seed.

FOR SALE — Edible soybean seed. Bansei, Etum, Imperial, Funk Delicious, Easycook and Giant Green available. Write for wholesale prices. W. Chmielewski, Ringoes, N. J.

FOR SALE — Edible Soybean Seed. New Mendota — yielded over 40 bushels per acre. 25¢ per lb. or \$10.00 per bushel. Sousies — \$6.00 per bushel and a mixed lot of Etum and Kanum at \$4.50 per bushel. 10% discount on orders over \$500. Prices F.O.B. Whitewater. Herbert W. Chapman, Agricultural Instructor, Whitewater, Wisconsin.

FOR SALE: Used Steel Storage Tanks, 8,000, 10,000, 12,000, 18,000 gal. And other sizes. Stanhope, Wayne, Penna.

Seed Directory

A charge of \$1 has been made for listing in the February, March and April issues. Listings for the March and April issues can be made for 75c. Quantity for sale and variety are included.

IOWA

Castana — Fred W. Hawthorn, 1,000 bushels blue tag, certified Richlands, germination 92 percent. No crop or weed seeds.

IOWA

Hudson — Strayer Seed Farms, 2,500 bushels Richlands, 250 bushels Kingwa, 250 bushels Banseis, 500 bushels Mukdens.

WISCONSIN

Whitewater — Herbert W. Chapman, a supply of new Mendota, Sousies and a mixed lot of Etum and Kanum.

ILLINOIS

Mason City — Ainsworth Seed Co., certified Chiefs, 99.9 percent field purity, in carlots.

NEW JERSEY

Ringoes — W. Chmielewski, Edible varieties available: Bansei, Etum, Imperial, Funk Delicious, Easycook and Giant Green.

— s b d —

The average yield of wheat in three different comparisons each year for the last 23 years has been 33.5 bushels per acre where drilled in soybean stubble as compared with 27.1 bushels per acre where drilled in standing corn. These results have been secured in the crop rotation experiments on the Soils and Crops Experiment Farm at Lafayette. —Indiana 52nd Annual Report, 1939, p. 46.

SOYBEAN DIGEST



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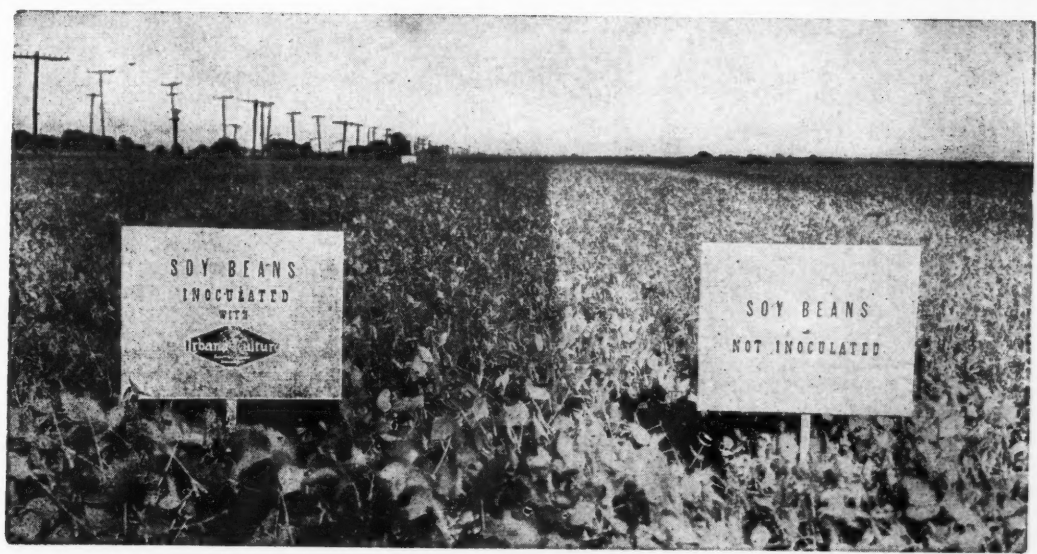
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EXPANSION BY GENERAL MILLS

Whitney Eastman, president of the vegetable oil and protein division of General Mills, Inc., has announced the appointment of two executives to his staff. They are Walter E. Flumerfelt as manager of the Belmond, Iowa extraction soybean processing plant, and Wilbur L. Taylor as technical director of the vegetable oil and protein division.

Mr. Flumerfelt, who joined the GMI organization in July, 1943, has been in the soybean business for about 15 years. He operated his own solvent extraction soybean processing plant — a batch arrangement — at Monticello, Ill., starting in 1929. He was a director in the National Soybean Processors Association for eight years, served on numerous industry committees, and was a

member of the WPB Industry Advisory Council.

With the formation of the new vegetable oil and protein division of GMI, Mr. Flumerfelt was appointed manager of operations for the processing unit at Belmond. Priorities have been granted for the installation of continuous solvent extraction processing equipment at that site. Also, now under construction are storage facilities for half a million bushels of soybeans. Present plans call for soybean processing operations to begin in the early summer at Belmond.

Mr. Taylor had a share in the development of special soybean oils and extracted soybean products and for several years has taken an active part in the manufacture of a line of soy flours, proteins and lecithins.

He assisted in drawing up specifications for the Soy Flour Association and is a member of the Soy Foods Research Council.

INOCULATE— "THIS IS THE YEAR"

Following are two Wisconsin comments concerning the need for inoculation of 1944 soybean plantings.

W. W. Umbreit, Assistant Professor of Agricultural Bacteriology: This is the year to inoculate. Because of the war, nitrogen fertilizers are scarce and expensive, if, indeed, they can be obtained at all. Still the need for increased production demands more soil nitrogen. Hence the legume crop is of very definite importance since it can use the nitrogen of the air, if it is supplied with the right type of bacteria.

The benefits from inoculation are usually so great and the cost is so little that it may well be considered a necessity. Inoculation will prevent many cases of outright crop failure and will give increased crop yield and increased protein content in a very high proportion of the cases. In many cases the differences are so large that one can see them at a glance; in other cases they may not be as noticeable in the field, but usually they are there, in the form of higher protein. We must make a real effort this year to have all legume seed properly inoculated. If we increase the yield of protein from legumes in the United States by only 5 percent (usually inoculation increases are much larger than this), we gain enough extra protein to feed a third of Europe for a month.

John P. Dries, Saukville, Wis.: I am wholeheartedly in approval of using inoculation on the coming soybean crop. Because the benefits derived can never be measured in dollars and cents when you improve your land by adding nitrogen taken from the air which seems to be the only thing which isn't taxed or subsidized. I do know the goal will never be met until some adjustment in price ceiling is made or subsidies paid for the production of so vital an oil crop during this World War II. Therefore it seems to the best interests of the bean growers to get busy and inoculate the few acres of soybeans so as to get the greatest possible yield on this small acreage.

— s b d —



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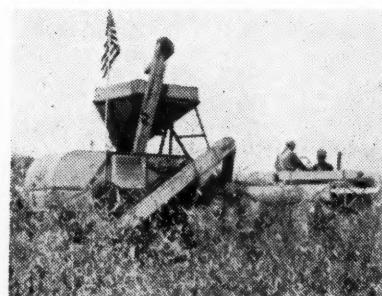
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— Prairie Farmer

THE FLAG FLIES ON THE FARM FRONT

There is a real story of patriotism behind this picture. R. E. Kirchner, Loraine, Ill., farmer, found the old combine in an abandoned weed patch, bought it, fixed it up, and then harvested 207 acres of soybeans with it. Every day during the harvest the flag flew over the combine.

Kirchner has a boy in the South Pacific...

IN THE MARKETS

● **SOYBEAN INSPECTIONS.** Receipts of soybeans inspected in December continued to decrease and totaled 5,603 cars compared with 19,547 cars in November. The December inspections brought the total for the first three months of the season to 58,422 cars compared with 31,912 cars for the same months of 1942.

The quality of the soybeans inspected in December was somewhat lower than that of the November inspections. Only 66 percent graded No. 2 or better compared with 79 percent in these grades in November. Thirty-four percent fell in the lower grades compared with 21 percent the previous month.

Inspections of soybeans in December included the equivalent of 52 cars inspected as cargo lots, and truck receipts equivalent to about 115 cars.

Period 1943-44	Illinois	Indiana	Total Car Lots Iowa	Missouri	Ohio
October	16,474	2,901	2,899	3,084	4,200
November	5,933	1,050	1,327	2,408	3,204
December	1,401	592	286	268	1,340
	23,808	4,543	4,512	5,760	8,744

● **SOYBEANS: STOCKS ON FARMS ON JANUARY 1.** (U. S. Crop Reporting Board.)

State	1943	1944	State	1943	1944
	Thousand bushels			Thousand bushels	
N. Y.	282	270	Md.	543	237
N. J.	230	252	Va.	927	486
Pa.	345	372	W. Va.	22	18
Ohio	11,711	9,238	N. C.	2,021	1,550
Ind.	12,135	7,854	S. C.	52	70
Ill.	26,560	16,944	Ga.	68	42
Mich.	1,522	1,357	Ky.	330	292
Wis.	538	717	Tenn.	378	342
Minn.	2,378	1,561	Ala.	160	172
Iowa	19,853	11,800	Miss.	1,222	579
Mo.	3,179	2,000	Ark.	814	406
N. Dak.	40	43	La.	516	227
S. Dak.	195	101	Okla.	62	35
Nebr.	420	160	Tex.	72	36
Kans.	1,145	695			
Del.	495	263	U. S.	88,215	58,119

● **CANADIAN OILSEED PRODUCTION.** A supplemental report on oilseed crops in Canada indicates that production in 1943 was considerably higher than in 1942, although much below the goals set by the Dominion Provincial Conference last December, reports **Foreign Crops and Markets.**

Flaxseed acreage was increased by 87.5 percent, while production rose by only 18.0 percent. Production is estimated at 17,689,000 bushels compared with 14,992,000 last year. The 50,400 acres planted to soybeans represented little more than half of the goal of 90,400 acres. The 910,000 bushels of beans harvested were 21,000 less than in 1942. Since rapeseed and sunflower seed were produced on a commercial scale for the first time this year, the 1943 crops of 3,423,000 and 18,600,000 pounds, respectively represent net contributions to the increase in Canada's oilseed production.

● **STANDARD SHORTENING SHIPMENTS.** By members of Institute of Shortening Mfgs., Inc.

Week ending January 8, lbs.....	6,402,734
Week ending January 15.....	6,893,958
Week ending January 22.....	6,458,751
Week ending January 29.....	6,382,759
Week ending February 5.....	5,546,898

● **STOCKS.** Stocks of soybeans in commercial storage in bushels, reported by the Food Distribution Administration: Jan. 18, 25,013,632; Jan. 25, 23,601,060; Feb. 1, 22,513,067; Feb. 8, 21,082,221. The latter figure compares with 4,448,000 bushels a year ago.

GOVERNMENT ORDERS

● **OIL CEILING.** Maximum prices of refined soybean oils have been increased by the Office of Price Administration from seven hundredths of a cent to forty hundredths of a cent a pound in tank car lots over previously listed maximums for this commodity, effective February 2.

The action was necessitated by the recent termination of a Commodity Credit Corporation payment of half a cent a pound on soybean oils, which had been paid on oils refined from the 1942 crop of soybeans.

The new maximum prices for soybean oil produced from the 1943

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soybean crop, in tank cars, basis f.o.b. Decatur, Ill., are 12.59 cents a pound for refined, unbleached and undeodorized, 12.73 cents a pound for refined, bleached and undeodorized, 12.8 cents a pound for refined, deodorized and unbleached, 12.94 cents a pound for deodorized and bleached, 13.4 cents a pound for winterized, 13.8 cents a pound for hydrogenated margarine soybean oil, 13.95 cents a pound for high titre hydrogenated soybean oil.

This pricing action will have no effect on retail prices.

● **CRUDE OIL.** The regulation controlling prices of crude soybean oil in tank cars, which previously had set the maximum price at 11.75 cents a pound f.o.b. midwestern mills, was amended by the Office of Price Administration to supply specific prices for this oil f.o.b. the mills located in the various states in which it is crushed.

These specific prices simply specify differentials which already were recognized and do not make any actual change in the maximum prices of the oil.

The maximum price per pound f.o.b. mills in California, Oregon and Washington is 12.5 cents a pound, in Arizona, 12.125, in Edgewater, N. J., Houston, Texas, New Orleans, La., and Savannah Ga., 12, in Michigan, New Jersey (other than Edgewater), New Mexico, New York, North Carolina, Ohio, Pennsylvania and Virginia, 11.875, Alabama, Arkansas, Florida, Georgia (except Savannah), Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana (except New Orleans), Minnesota, Mississippi, Missouri, Nebraska, Oklahoma, South Carolina, Tennessee, Texas (except Houston) and Wisconsin, 11.75 cents.

● **EDIBLE OILS.** The Food Distribution Administration has authorized the use of 10,608 tank cars of edible oils — cottonseed, peanut, soybean and corn — by oil refiners, shortening and margarine manufacturers during January, February and March. These oils are regulated under Food Distribution Order No. 29.

The quarterly authorization includes 4,219 tank cars of cottonseed oil, 880 tank cars of peanut oil, 4,646 cars of soybean oil, and 863 cars of corn oil.

Their use is divided as follows:

1. For the manufacture of edible finished products for civilian use under quotas prescribed in Food Distribution Order No. 42 — 9,994 cars.
2. For the Army, Navy, Marine Corps, War Shipping Administration, Allies, and FDA purchases — 435 cars.
3. For industrial users — 179 cars.

● **FEBRUARY ALLOCATIONS.** Feed mixers, dealers and feeders who have been unable to obtain sufficient quantities of oilseed meal through regular trade channels have been allocated 140,000 tons by the War Food Administration for distribution during February.

Approximately 80,000 tons were made available through set-aside provisions of a WFA order — FPO 9, Revision 3 — and the balance will be made up of meal produced from midwest soybeans by Southern processors under contract with the Commodity Credit Corporation.

The meal will be distributed to the feed trade through AAA State Committees. With the cooperation of Feed Advisory Committees, the State Committees determine what segments of the trade are in most need of supplies to carry on normal operations. Because demand for oilseed meal exceeds supplies, it has not been possible for all users to obtain their pro rata shares through regular trade channels, and WFA allocations are made for the purpose of correcting maldistribution and insuring, insofar as possible, equity of treatment among all users.

● **USE OF FATTY ACIDS.** Under an amendment to Food Distribution Order No. 29, the War Food Administration has extended the prohibitions on the use of cottonseed, peanut, soybean and corn oils to cover all fatty acids made from these oils. However, the prohibited uses do not apply to fatty acids made from by-products of processing permitted by the order, except in the case of fatty acids made from stearine. The amendment became effective January 18, 1944.

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*Analysis of Soybeans
and Products*

Official Chemists for National Soybean Processors Association